TREATMENT OF DIVERTICULITIS AND ITS COMPLICATIONS

COMMENTARY
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Diverticular disease of the colon is common in the Western world, affecting one-third of the population older than the age of 45.

Two-thirds of the population are older than age 85.

10% to 25% of these individuals develop symptomatic disease.
• 20% of them develop complications including obstruction, abscesses, fistulas, and perforation.

• In the African population, the incidence is increasing presumably due to the westernization of the diet.
Currently mild diverticulitis is generally managed with oral antibiotics yielding a good symptom resolution.

Hospital admission has been suggested to be unnecessary in a majority of cases.

Diagnosis of acute uncomplicated diverticulitis should be primarily based on clinical findings.
Some authors say mild diverticulitis is a self-limiting disease process for which bowel rest alone is equivalent to antibiotic treatment in terms of recurrence and time to complete recovery.

The risk of perforation following a single (treated) episode of diverticulitis is in the order of 2% per year.
Hospitalization is required if:
1. Patients are unable to tolerate oral hydration.
2. Out-patient therapy fails.
3. Notable fever and or peritoneal signs develop.
4. Pain is severe enough to require narcotic analgesia.
5. Patients have chronic underlying medical conditions.
6. Patient is older than 85 yrs.
Once the acute episode has resolved the patient should undergo colonoscopy.

15 – 30% may require surgery due to lack of response or development of complications.

Surgery is not indicated after an uncomplicated first episode because only 7 – 35% experience a recurrent episode.
After a second episode the probability of a third episode surpasses 50%.

Subsequent attacks are less likely to respond to medical therapy and they carry a higher mortality rate.
Emergency surgery is undertaken for:

- Free-air perforation with peritonitis
- Poor response to medical therapy
- Suppurative peritonitis secondary to a ruptured abscess.
- Abdominal or pelvic abscess not amenable to percutaneous drainage.
Elective surgery is indicated if:

- Two or more attacks successfully treated medically (traditional teaching)
- Three or four attacks of uncomplicated diverticulitis (current recommendations)
- Patients with one attack that either includes a contained perforation, colonic obstruction, inflammatory involvement of neighbouring organs with a fistula.
### Original Hinchey Classification

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Pericolic abscess confined by the mesentery of the colon</th>
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<tbody>
<tr>
<td>Stage 2</td>
<td>Pelvic abscess resulting from a local perforation of a pericolic abscess</td>
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<td>Stage 3</td>
<td>Generalised peritonitis resulting from rupture of pericolic or pelvic abscess into the peritoneal cavity</td>
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<td>Stage 4</td>
<td>Faecal peritonitis resulting from the free perforation of a diverticulum</td>
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# Ambrosseti Classification

<table>
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<th>MODERATE DIVERTICULITIS</th>
<th>SEVERE DIVERTICULITIS</th>
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<tr>
<td>Localised sigmoid wall thickening (&gt;5mm)</td>
<td>Same as mild diverticulitis +1 of the ff:</td>
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<tr>
<td>Inflammation of pericolic fat.</td>
<td>1. Abscess.</td>
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<td>2. Extraluminal air.</td>
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<td>3. Extraluminal contrast.</td>
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Ambrosetti et al  CT-based classification of sigmoid diverticulitis
CT scan has been justified by several radiological studies to have a high sensitivity (97%) and specificity (100%) for diverticulitis.

Contrast enema has a sensitivity of only 82% and a specificity of 81% for diverticulitis.
• **SURGICAL OPTIONS**

1. The **one stage** procedure involves resection and primary anastomosis to re-establish continuity. A diverting loop ileostomy can be added to this, resulting in low morbidity, good quality of life and low chances of a permanent stoma.
2. The **two stage** approach, resection of the inflamed colon and diversion of the sigmoid colon via a Hartmann’s procedure (Hinchey 3 and 4)

- Hartmann’s procedure reversal is associated with major morbidity and mortality. Reported morbidity and mortality rates range from 10 to 50% and 1 to 28%, respectively.
Postoperative ileus, wound infection, anastomotic leak are commonly encountered in the H R.

The benefit of the procedure: the diseased segment is removed during the primary operation and the source of continued contamination is eliminated.
The three stage approach involves:

1. Drainage of abscess and a diverting colostomy.
2. Removal of diseased bowel, is performed 2-8 weeks later.
3. Reanastomosis of bowel, is performed 2-4 weeks later.

This is presently seldom practiced, as it fails to address the septic focus.
Laparoscopic peritoneal lavage is a proposed alternative treatment to emergency resection for complicated diverticulitis.

Laparoscopic sigmoidectomy is associated with
1. Reduced recovery time
2. Return to bowel function
3. Stoma avoidance
4. Reduced hospital stay, and
5. Decreased morbidity and costs.
• Low conversion rate as 2.8% and a median hospital stay of 4 d had been reported.

• Currently no RCT available to support the implementation of laparoscopic lavage alone.

• Experiences of laparoscopic lavage have been promising with respect to perioperative mortality and complications.
Recurrence of sigmoid diverticulitis was noted in 4 out of 92 treated patients, none of whom required surgery after a median follow-up of 36 mo, Myers et al.
OTHER COMPLICATIONS

- Fistulas appears to be increasing, reported to occur in approximately 12% of patients.
- Colovesical fistulas account for two thirds of the cases, followed by colovaginal, colocutaneous, and enterocolic.
- The most commonly reported symptoms in these patients are:
  1. abdominal pain (43%),
  2. pneumaturia (43%),
  3. cystitis (40%),
  4. faecaluria (38%),
  5. diarrhoea (15%),
  6. haematuria (5%).
REFERENCES